Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE (Data Science))   (Sem.–5)

COMPUTER NETWORKS

Subject Code : BTCS-504-18

M.Code : 92321

Date of Examination : 16-01-2023

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Write briefly :**

   a) What are the different network topologies?

   b) Why OSI model is used?

   c) What is bandwidth in network?

   d) What is the purpose of ARQ?

   e) What is meant RARP?

   f) What is IPv6 in networking?

   g) What are virtual circuit networks?

   h) Discuss UDP Protocol.

   i) What is DDNS?

   j) Write about HTTP.

SECTION-B

2. Discuss in brief the performance parameters used in transmission media.

3. What do you mean by error detection and correction? Discuss cyclic redundancy check.

4. What is forwarding routing protocol? Write about any one algorithm used in it.

5. What is multiplexing? Compare TDM, FDM and WDM.

6. How does congestion control work in computer networks?

SECTION-C

7. Define multiple access protocol. How CSMA/CA protocol is used to avoid the collision in networks?

8. What is the use of QoS in networking? Discuss the Leaky Bucket Algorithm.

9. Explain how Cryptography is used to enhance security in Computer Networks?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.